

fraction of organic solvents and solids used in the formulation or preparation of inks at the vinyl or urethane printing plant where they are used.

Rotogravure print station means any device designed to print or coat inks on one side of a continuous web or substrate using the intaglio printing process with a gravure cylinder.

Rotogravure printing line means any number of rotogravure print stations and associated dryers capable of printing or coating simultaneously on the same continuous vinyl or urethane web or substrate, which is fed from a continuous roll.

Vapor capture system means any device or combination of devices designed to contain, collect, and route organic solvent vapors emitted from the flexible vinyl or urethane rotogravure printing line.

(b) All symbols used in this subpart not defined below are given the same meaning as in the Act or in subpart A of this part.

a=the gas stream vents exiting the emission control device.

b=the gas stream vents entering the emission control device.

f=the gas stream vents which are not directed to an emission control device.

C_{aj} =the concentration of VOC in each gas stream (j) for the time period exiting the emission control device, in parts per million by volume.

C_{bi} =the concentration of VOC in each gas stream (i) for the time period entering the emission control device, in parts per million by volume.

C_{rk} =the concentration of VOC in each gas stream (k) for the time period which is not directed to an emission control device, in parts per million by volume.

G=the weighted average mass of VOC per mass of ink solids applied, in kilograms per kilogram.

M_{ci} =the total mass of each ink (i) applied in the time period as determined from plant records, in kilograms.

M_{dj} =the total mass of each dilution solvent (j) added at the print line in the time period determined from plant records, in kilograms.

Q_{aj} =the volumetric flow rate of each effluent gas stream (j) exiting the emission control device, in standard cubic meters per hour.

Q_{bi} =the volumetric flow rate of each effluent gas stream (i) entering the emission control device, in standard cubic meters per hour.

Q_{rk} =the volumetric flow rate of each effluent gas stream (k) not directed to an emission control device, in standard cubic meters per hour.

E=the VOC emission reduction efficiency (as a fraction) of the emission control device during performance testing.

F=the VOC emission capture efficiency (as a fraction) of the vapor capture system during performance testing.

W_{oi} =the weight fraction of VOC in each ink (i) used in the time period as determined from Reference Method 24, manufacturer's formulation data, or plant blending records, in kilograms per kilogram.

W_{si} =the weight fraction of solids in each ink (i) used in the time period as determined from Reference Method 24, manufacturer's formulation data, or plant blending records, in kilograms per kilogram.

W_{oj} =the weight fraction of VOC in each dilution solvent (j) added at the print line in the time period determined from Reference Method 24, manufacturer's formulation data, or plant blending records, in kilograms per kilogram.

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§ 60.582 Standard for volatile organic compounds.

(a) On and after the date on which the performance test required by § 60.8 has been completed, each owner or operator subject to this subpart shall either:

(1) Use inks with a weighted average VOC content less than 1.0 kilogram VOC per kilogram ink solids at each affected facility, or

(2) Reduce VOC emissions to the atmosphere by 85 percent from each affected facility.

(b) [Reserved]

§ 60.583 Test methods and procedures.

(a) Reference Methods in appendix A of this part, except as provided under § 60.8(b), shall be used to determine compliance with § 60.582(a) as follows:

(1) Method 24 for analysis of inks. If nonphotochemically reactive solvents are used in the inks, standard gas chromatographic techniques may be used to identify and quantify these solvents. The results of Reference Method 24 may be adjusted to subtract these solvents from the measured VOC content.